

Test of the Mucool test facility LH2 pump

CD -06/04/02

Description of the test

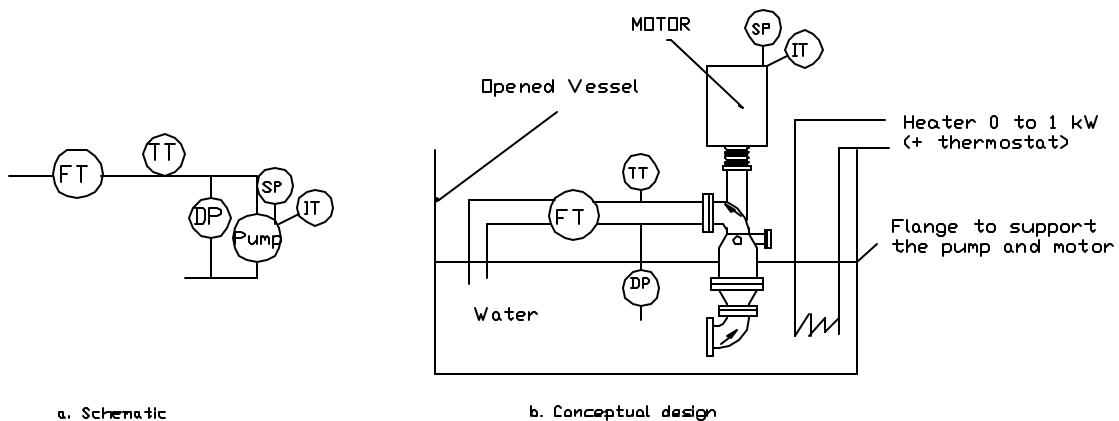
The purpose of the test is:

Simulate the flow of LH2, using water

1. To compare the mass-flow of water in direct and reverse mode
2. To measure the mass flow for different water temperature
3. To measure the mass flow for different motor current
4. To measure the Pressure drop across the pump
5. To correlate the measurement of the water flow and the motor speed
6. To determine the flow rate to use in the Mucool experiment
7. Validation of theoretical model.

The test will be performed at ER where access to ACNET is possible. The mechanical and electrical set-up is provided by Cryo dpt.

Performance measurement of the Mucool test facility Pump



List of materials

Material	Qty	Description	Supply
LH2 pump	1		
Flow meter	1	Differential Pressure	FNAL
Pressure gage	1	Differential Pressure	FNAL
Temperature sensor	1	Infrared	
Motor	1	> 2HP	FNAL / MW9
Motor driver	1		FNAL / ER
Current // power	1		FNAL
Speed	1		FNAL